Title: Life or Death on the Net

Brief Overview:

This is an introductory lesson to use the Internet for researching information about a mathematician whose date of birth/date of death matches or is in close proximity of a student's date of birth. During their research, the students are required to find information for a birth certificate, map of birthplace, silhouette or picture, time-line, obituary, epitaph, brief history of work, and a characteristic that makes the mathematician unique.

Links to Standards:

- **Mathematics as Problem Solving**
  Students will be exposed to problem solving approaches to investigate and understand mathematical content.

- **Mathematics as Communication**
  Students will practice their oral and written skills in the presentation of the information collected. Students will read written expressions of mathematics with understanding. Students will reinforce their understanding of the connection between mathematics and our society.

- **Mathematics as Reasoning**
  Students will judge the validity of arguments that deal with the work of their mathematician.

- **Mathematical Connections**
  Students will use and value the connections between math and other disciplines.

Grade/Level:

Grades 8-12

Prerequisite Knowledge:

Students should have working knowledge of the following skills:

- Word processing
- Use of the computer

Objectives:

Students will:

- use the Internet on the computer to research and collect information.
- take information found and create a birth certificate, a map of birthplace, a brief written report about his/her life and accomplishments, an epitaph, an obituary, a drawing or print-out of a picture/silhouette of their mathematician, and a time-line.

Materials/Resources/Printed Materials:

- Paper/Pen
- Computer/Printer
- Teacher/Internet example resources
- Activity sheets 1-5 explaining how to use Internet for this project

Development/Procedures:

1. Teacher will guide the students through basic word processing skills and how to use the Internet. (Activity Sheet 1)

2. Teacher will hand out (Activity Sheets 2-4) to gather the information for the project.

3. Teacher will hand out (Activity Sheet 5) which explains how the project is to be done.

Performance Assessment:

- Students will receive 25% of the grade from the completion of Activity Sheets 1-4.
- Students will receive 75% of the grade from the completion of final project using directions on Activity Sheet 5.

Extension/Follow Up:

- Oral presentations of final project with students dressed in character.
- Word search including names of 25 mathematicians.
- "Fashion Show" in which all students are dressed as their mathematicians.
- Time line beginning 50 years before your birth date and ending 50 years from now. Label significant mathematical, scientific, and historical events occurring in the past, then project what you think might happen historically, mathematically and personally over the next 50 years..
- Create Jeopardy game using mathematics or mathematical facts from research on the Internet.

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ACTIVITY 1

Name _____

NETSCAPE
(Your door to information from the world.)

To get from our classroom to the world, **Log in** to the network and go to the **Netscape** page. On the **Netscape** page, click on **Net Search** on the menu bar. You will then see

NETSEARCH

Excite	Infoseek	Lycos	Yahoo	Customize

Do

Search

Click on **Yahoo.**

Type **"MacTutor History of Mathematics"** in the search box.

Click on **Search**.

You should now see **Science :Mathematics : History**
MacTutor History of Mathematics

Click on that **MacTutor History of Mathematics .**

It should now say "**Welcome to the Mac Tutor History of Mathematics archive."** That is followed by a list of topics. Choose **"Anniversaries for the year"** by clicking on that.

Now you see a calendar. Click on the month and day of your birth. Choose a mathematician who was born or who died on this date, or a date close to that of your birth date.

Mathematician chosen: _____

Present URL location: _____

ACTIVITY 2

Name_____ Birth date_____

Name of mathematician _____

Date of birth _____

Date of death _____

Place of birth _____

Find a map showing the location of your mathematician's place of birth.

URL location _____

Sketch of the map with location clearly marked.

Find a picture of your mathematician.

URL location _____

ACTIVITY 3

Name _____

Name of your mathematician _____

Find a history of your mathematician.

URL location: _____

Notes taken from this history:

Write a question concerning something you found interesting about him/her that your classmates could discover.

_____

_____

_____

URL location: _____

ACTIVITY 4

Name _____

Name of your mathematician : _____

Date of birth: _____ Date of death: _____

Make a time line, going from at least 50 years before his/her birth to 50 years after his/her death (or to the present time if he/she is still living). On this time line, put in at the appropriate locations, the accomplishments and significant dates of your mathematician and the dates of major historical events of that time period.

URL location: _____

ACTIVITY 5

Name _____

Due Date _____

Now you have all of your information to complete your final product.

_____1) Create a unique title page. Include your mathematician's name and your name.

_____2) Create a birth certificate. (Be creative..... What information should be included?)

_____3) Find or draw a picture or silhouette of your mathematician.

_____4) Make a final copy of your time line with all dates and events labeled.

_____5) Write, in your own words, a brief history of the life and works of your mathematician.

_____6) Draw and label a map or download from the Internet, indicating the location in the world of your mathematician's birth place and where their work was done.

_____7) Write an epitaph and an obituary for your mathematician. (Be creative..... relate it to his/ her life.)

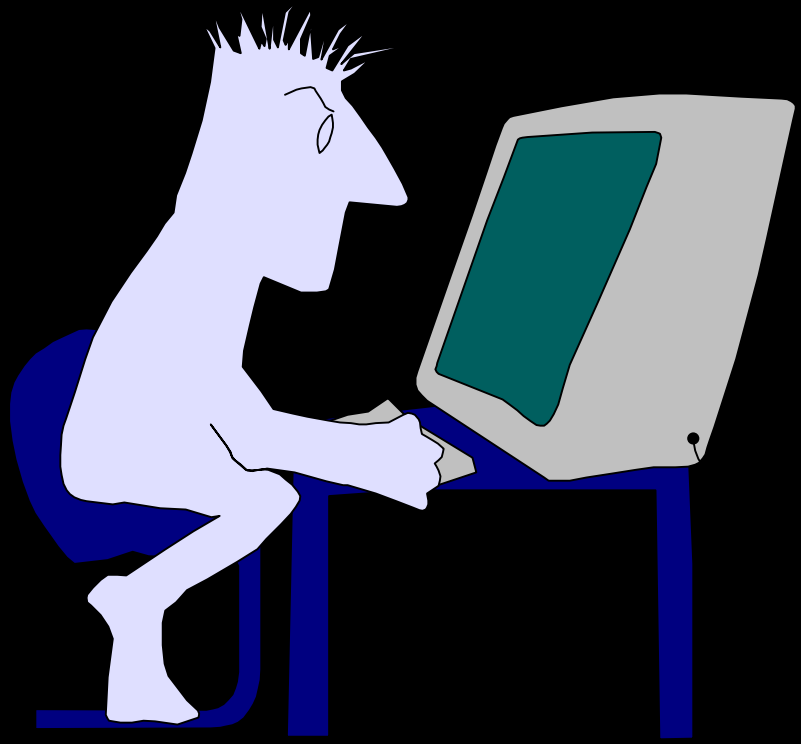
Now put it all together and your project is finished.

Life or Death on the Net

A study of the life of a mathematician

Life or Death on the Net

- Use Netscape
- Click on Yahoo
- Type “MacTutor History of Mathematics” in the search box
- Click on Search

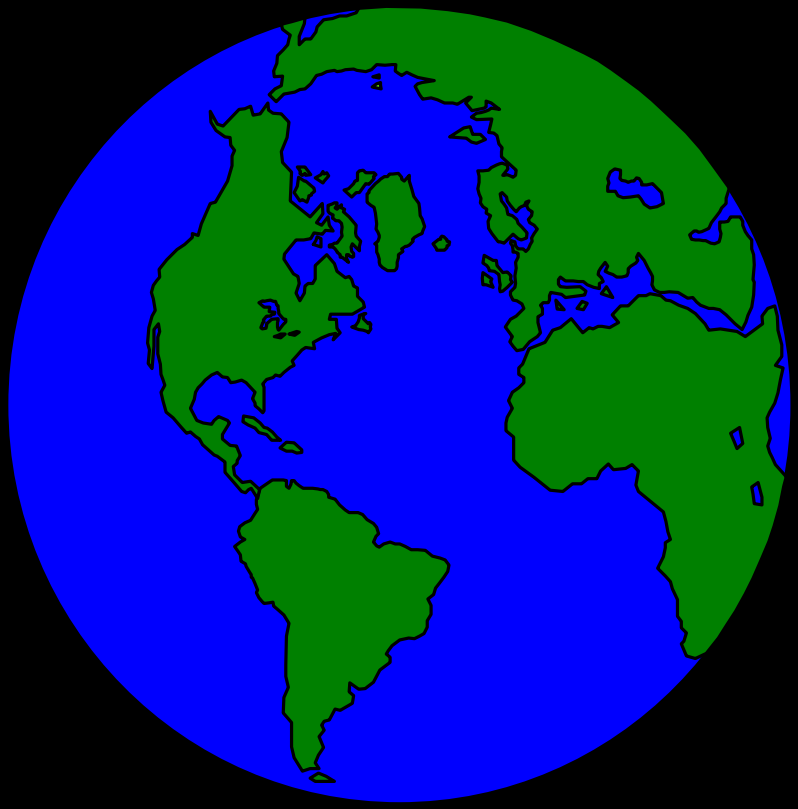


Life or Death on the Net

- Choose MacTutor History of Mathematics from the list by clicking on it
- Choose Anniversaries for the year from the given list
- Click on the month and day of your birth from the calendar given
- Now from that list choose your mathematician

Life or Death on the Net

- Find a map showing the location of your mathematician's place of birth



Life or Death on the Net

- Find a picture of your mathematician

Life or Death on the Net

- Find a history of your mathematician and write a summary
- Write a question about him/her that your classmates could discover something interesting about your mathematician
- Make a time line, going from at least 50 years before his/her birth to 50 years after his/her death

Life or Death on the Net Final Project

- Create a unique title page
- Create a birth certificate
- Include a picture or silhouette of your mathematician
- Make a final copy of time line
- Write a brief history of your mathematician
- Include a map of the place of birth of your mathematician
- Write an epitaph and obituary